WHAT IS CLAIMED IS:

1. A method of analyzing and decrypting a malicious encryption script, comprising the steps of:

classifying a malicious script encryption method into a case where a decryption function exists in malicious scripts and is an independent function that is not dependent on the external codes such as run time library, a case where a decryption function exists and is a dependent function that is dependent on external codes, and a case where a decryption function does not exist; and

if the decryption function exists in malicious scripts and is the independent function that is not dependent on the external codes, extracting a call expression and a function definition for the independent function, executing or emulating the extracted call expression and function definition for the independent function, and obtaining a decrypted script by putting a result value based on the execution or emulation into an original script at which an original call expression is located.

2. The method according to claim 1, wherein whether there exists the dependency of the decryption function on the external codes is determined based on whether there exists the dependency of all codes within the decryption function on the external codes, whether actual parameters for decryption function call in all program are constants, and whether only functions with no side effects in the decryption function are called.

3. The method according to claim 2, wherein upon determination of the dependency of all codes within the decryption function on the external codes, all codes within function F_i are determined as having no dependency on the external codes if function F_i satisfies the following

formula:

$$V_i \cap E_i = \phi ,$$

where V_i is a set of global variables defined or used in function F_i, and is obtained according to the following formula:

$$V_i = A_i - D_i, \text{ and}$$

E_i is a set of variables defined or used in an external region of function F_i and is obtained according to the following formula:

$$E_i = \bigcup_{i \neq j, 0 \leq j \leq n} V_j$$

where n is the number of functions defined in the script,

F_i is an i-th defined function in the script ($1 \leq i \leq n$),

A_i is a set of all variables defined or used in function F_i ($1 \leq i \leq n$),

D_i is a set of all variables declared as Dim in function F_i ($1 \leq i \leq n$), and

V_0 is a set of variables defined or used in a global region which does not belong to any function.